CLAIM AMENDMENTS:

1. (Currently amended) A <u>computer-implemented</u> method for executing a code, comprising: receiving an instruction;

determining whether the instruction is a trigger instruction;

selecting an entry in a trigger table if the instruction is a trigger instruction, the entry associated with the trigger instruction; and

executing an auxiliary code referenced by the entry in the trigger table.

- 2. (Original) The method of claim 1, further comprising: spawning a new thread, the new thread executing instructions included in the auxiliary code.
- 3. (Original) The method of claim 2, further comprising: executing the new thread concurrently with a parent thread, the parent thread including the trigger instruction.
- 4. (Original) A method for executing a code, comprising: receiving a trigger instruction; selecting an entry in a trigger table, the entry associated with the trigger instruction; and executing a p-slice code referenced by the entry in the trigger table.
- 5. (Original) The method of claim 4, further comprising: spawning a new thread, the new thread executing instructions included in the p-slice code.
- 6. (Original) The method of claim 5, further comprising: executing the new thread concurrently with a parent thread, the parent thread including the trigger instruction.
- 7. (Original) The method of claim 6, further comprising:

storing state information from the parent thread before spawning the new thread.

- 8. (Original) The method of claim 7, further comprising: copying the state information for use in the new thread.
- (Original) The method of claim 6, further comprising:
 storing a register value of the parent thread before spawning the new thread.
- 10. (Original) The method of claim 9, further comprising: copying the register value of the parent thread for use in the new thread.
- 11. (Original) The method of claim 4, wherein the entry in the trigger table is selected by associative lookup of the trigger instruction.
- 12. (Original) The method of claim 4, further comprising: reading an instruction pointer for the p-slice code from the entry in the trigger table.
- 13. (Previously presented) An article of manufacture comprising a computerreadable medium having stored thereon instructions adapted to be executed by a
 processor, the instructions which, when executed, define a series of steps to be used to
 control a method for executing a code, said steps comprising:
 receiving an instruction;
 determining whether the instruction is a trigger instruction;
 selecting an entry in a trigger table if the instruction is a trigger instruction, the entry
 associated with the trigger instruction; and
 executing an auxiliary code referenced by the entry in the trigger table.
- 14. (Previously presented) The article of manufacture of claim 13, wherein the series of steps further comprises: spawning a new thread, the new thread executing instructions included in the auxiliary code.

PATENT

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- 15. (Original) A system, comprising:
- a current thread;
- a function body configured to be executed as part of the current thread, the function body comprising at least one trigger instruction;
- an auxiliary code; and
- a trigger table, the trigger table comprising an entry, the entry associated with the trigger instruction and including a reference to the auxiliary code, the trigger table configured to allow the lookup of the entry when the trigger instruction is processed.
- 16. (Original) The system of claim 15, wherein the auxiliary code is configured to spawn a new thread when auxiliary code is executed.
- 17. (Original) The system of 16, wherein the auxiliary code is configured to store the value of a register associated with the current thread, when the auxiliary code is executed.
- 18. (Original) A system, comprising:
- a current thread:
- a function body configured to be executed as part of the current thread, the function body comprising at least one trigger instruction;
- a p-slice code; and
- a trigger table, the trigger table comprising an entry, the entry associated with the trigger instruction and including a reference to the p-slice code, the trigger table configured to allow the lookup of the entry when the trigger instruction is processed.
- 19. (Original) The system of claim 18, wherein the p-slice code is configured to spawn a new thread when the p-slice code is executed.
- 20. (Original) The system of claim 18, wherein the p-slice code is configured to store the value of at least one register associated with the current thread, when the p-slice code is executed.

- 21. (Original) The system of claim 18, wherein the trigger table is an associative lookup table.
- 22. (Currently amendedl) A <u>computer-implemented</u> method for compiling, comprising: receiving a function body, the function body comprising a trigger instruction; outputting an auxiliary code associated with the function body and the trigger instruction; and creating an entry in a trigger table, the entry associated with the trigger instruction and the auxiliary code.
- 23. (Original) The method for compiling of claim 22, further comprising: creating a stub block, the stub block comprising a spawn instruction, the spawn instruction configured to spawn a new thread, the new thread configured to execute the auxiliary code.
- 24. (Original) A method for compiling, comprising:
 receiving a function body, the function body comprising a trigger instruction;
 outputting a p-slice code associated with the function body and the trigger instruction;
 and
 creating an entry in a trigger table, the entry associated with the trigger instruction and
 the p-slice code.
- 25. (Original) The method of claim 24, further comprising:
 receiving the p-slice code associated with the function body and the trigger instruction.
- 26. (Original) The method of claim 24, further comprising: generating the p-slice code associated with the function body and the trigger instruction.
- 27. (Original) The method of claim 24, further comprising:

creating a stub block, the stub block comprising a spawn instruction, the spawn instruction configured to spawn a new thread, the new thread configured to execute the p-slice code.

- 28. (Previously presented) The method of claim 27, further comprising: adding store instructions to the stub block, the store instructions configured to store state information of a current thread, the state information of the current thread including values contained in live-in registers of the new thread.
- 29. (Original) An article of manufacture comprising a computer-readable medium having stored thereon instructions adapted to be executed by a processor, the instructions which, when executed, define a series of steps to be used to control a method for compiling, said steps comprising: receiving a function body, the function body comprising a trigger instruction; outputting an auxiliary code associated with the function body and the trigger instruction; and creating an entry in a trigger table, the entry associated with the trigger instruction and the auxiliary code.
- 30. (Original) The article of manufacture of claim 29, wherein the auxiliary code is a p-slice code.